Rule 1.312 Claim Amendments

Please amend claims 1, 6 and 32 as follows:

1. (currently amended) A method comprising:

defining in a client in a multimedia streaming network at least one parameter for determining a rate adaptation operating range, wherein the streaming network comprises a server configured for providing streaming data to the client, the client having a receiver buffer for storing at least part of the streaming data to compensate for a difference between data transmission amount by the server and usage amount of the streaming data by the client so as to allow the client to have sufficient amount of streaming data to play out in a non-disruptive manner, and wherein the rate ~~adaption~~ adaptation operating range is used for rate adaptation between the server and the client;

providing to the server information indicative of said at least one parameter;

adapting in the server the data amount to a reception rate at the client based on said at least one parameter; and

adjusting in the client packet transfer delay variation based on said adapting, wherein said at least one parameter comprises a shift amount in time indicative of a difference between a sampling time and a transmission time of a packet at the server.

2. (previously presented) A method according to claim 1, wherein said shift amount is equal to said difference so as to allow the server to carry out said adapting based on the shift amount.

3. (previously presented) A method according to claim 1, wherein said shift amount is greater than said difference so as to allow the server to carry out said adapting based on the shift amount.

4. (previously presented) A method according to claim 1, wherein said at least one parameter further comprises a number specifying a maximum difference between the number of bytes that has been sent and the number of bytes that have been sampled so as to allow the server to carry out said adapting based on the number.

5. (previously presented) A method according to claim 1, further comprising adapting a sampling rate to the transmission rate in the server based on said at least one parameter.

6. (currently amended) A method comprising:

defining in a client in a multimedia streaming network at least one parameter for determining a rate adaptation operating range, wherein the streaming network comprises a server configured for providing streaming data to the client, the client having a receiver buffer for storing at least part of the streaming data to compensate for a difference between data transmission amount by the server and usage amount of the streaming data by the client so as to allow the client to have sufficient amount of streaming data to play out in a non-disruptive manner, and wherein the rate ~~adaption~~ adaptation operating range is used for rate adaptation between the server and the client;

providing to the server information indicative of said at least one parameter;

adapting in the server the data amount to a reception rate at the client based on said at least one parameter; and

adjusting in the client packet transfer delay variation based on said adapting, wherein said at least one parameter comprises a shift amount in time indicative a difference between a sampling time and a transmission time of a packet at the server.

7. (previously presented) A method according to claim 6, wherein said adapting comprises an adjustment of a transmission rate.

8. (canceled)

9. (previously presented) A method according to claim 6, wherein said adapting comprises an adjustment of both a transmission rate and a sampling rate.

10. (previously presented) A method according to claim 6, wherein said at least one parameter further comprises:

a number specifying a maximum difference between the number of bytes that has been sent and the number of bytes that have been sampled; and

a clock shift amount indicative of a clock drift between the client and the server.

11. (previously presented) A multimedia streaming network comprising:

at least a client; and

a server for providing streaming data to the client, the client having a receiver buffer to compensate for a difference between data transmission amount by the server and data usage amount by the client so as to allow the client to have sufficient amount of streaming data to play-out in a non-disruptive manner, wherein the client comprises:

a mechanism for defining at least one parameter for determining a rate adaptation operating range, and for providing information indicative of said at least one parameter to the server so as to allow the server to adapt the data amount to a reception rate at the client based on said at least one parameter; and

a mechanism to adjust a packet transfer delay variation based on said adapting, wherein said at least one parameter comprises a shift amount in time indicative of a difference between a sampling time and a transmission time of a packet at the server.

12. (previously presented) A multimedia streaming network according to claim 11, wherein said shift amount is equal to said difference so as to allow at the server to carry out said adapting based on said shift amount.

13. (previously presented) A multimedia streaming network according to claim 11, wherein said shift amount is greater than said difference.

14. (previously presented) A multimedia streaming network according to claim 11, wherein said at least one parameter further comprises a number specifying a maximum difference between the number of bytes that has been sent and the number of bytes that have been sampled so as to allow the server to carry out said adapting.

15. (previously presented) A multimedia streaming network according to claim 11, wherein the server comprises an adapting mechanism for adapting a sampling rate to the transmission rate based on said at least one parameter.

16. (previously presented) A multimedia streaming network according to claim 11, wherein said at least one parameter further comprises a further shift amount indicative of a clock drift between the server and the client.

17. (previously presented) A multimedia streaming network according to claim 11, wherein the server comprises an adapting mechanism for adjusting a transmission rate.

18. (canceled)

19. (previously presented) A multimedia streaming network according to claim 11, wherein the server comprises an adapting mechanism for adjusting both a transmission rate and a sampling rate.

20. (previously presented) A multimedia streaming network according to claim 11, wherein the server comprises a software program having at least a programming code for carrying out said adapting.

21. (previously presented) A non-transitory computer readable storage medium embedded with a software program comprising:

programming code for defining in a client in a multimedia network at least one parameter for determining a rate adaptation operation range, wherein the streaming network comprises a server configured for providing streaming data to the client, the client having a receiver buffer for storing at least part of the streaming data to compensate for a difference between data transmission amount by the server and usage amount of the streaming data by the client so as to allow the client to have sufficient amount of streaming data to play out in a non-disruptive manner, where information indicative to said at least one parameter is provided to the server so as to allow the server to carry out rate adaptation between the server and the client based on said at least one parameter, wherein said one parameter comprises a shift amount in time indicative of a difference between a sampling time and a transmission of a packet at the server; and

programming code for adjusting a packet transfer delay variation in the client for the rate adaptation.

22. (previously presented) A non-transitory computer readable storage medium according to claim 21, wherein said shift amount is equal to said difference so as to allow at the server to carry out said rate adaptation.

23. (previously presented) A non-transitory computer readable storage medium according to claim 21, wherein said shift amount is greater than said difference so as to allow the server to carry out said rate adaptation.

24. (previously presented) A non-transitory computer readable storage medium according to claim 21, wherein said at least one parameter further comprises a number specifying a maximum difference between the number of bytes that have been sent and the number of bytes that have been sampled so as to allow the server to carry out said rate adaptation.

25. (previously presented) A non-transitory computer readable storage medium according to claim 21, wherein said at least one parameter further comprises a further shift amount indicative of a clock drift between the server and the client.

26. (previously presented) An apparatus comprising:

a buffer for storing at least part of streaming data provided by a server in a multimedia streaming network to compensate for a difference between data transmission amount by the server and the data usage amount in a client so that sufficient amount of the streaming data can be played out in a non-disruptive manner;

a mechanism for defining at least one parameter that determines a rate adaptation operating range in the server so as to allow the server to adapt the data transmission amount to a reception rate at the client based on said at least one parameter, wherein said one parameter comprises a shift amount in time indicative of a difference between a sampling time and a transmission time of a packet at the server; and

a mechanism for adjusting a packet transfer delay variation based on said adapting.

27. (previously presented) An apparatus according to claim 26, wherein said defining mechanism comprises a software program having at least a programming code for defining said at least one parameter.

28. (previously presented) An apparatus according to claim 26, wherein said adjusting mechanism comprises a software program having at least a code for adjusting the packet transfer delay variation.

29. (previously presented) An apparatus according to claim 26, wherein said shift amount is equal to said difference so as to allow the server to carry out said adapting based on the shift amount.

30. (previously presented) An apparatus according to claim 26, wherein said shift amount is greater than said difference so as to allow the server to carry out said adapting based on the shift amount.

31. (previously presented) An apparatus according to claim 26, wherein said at least one parameter further comprises a number specifying a maximum difference between the number of bytes that have been sent and the number of bytes that have been sampled so as to allow the server to carry out said adapting based on the number.

32. (currently amended) A network element in the multimedia streaming network, said network element comprising:

a receiving module for receiving a request from a client have a buffer for storing at least part of streaming data provided by the network element to compensate for a difference between data transmission amount by the network element and data usage amount by the client so that the client has sufficient amount of streaming data to play out in a non-disruptive manner, the request indicative of at least one parameter that determines a rate adaptation operating range in the network element, wherein said one parameter comprises a shift amount in time indicative of a difference between a sampling time and a transmission time of a packet at the network element;

a server buffer for storing the streaming data to be transmitted to the client; and

a mechanism for adapting, based on said at least one parameter, the data transmission amount from the network element to a reception rate at the client, so as to allow the client to adjust a packet transfer delay variation based on said adapting.

33. (previously presented) A network element according to claim 32, wherein said adapting mechanism comprises a software program having at least a programming code for adapting the data transmission amount.

34. (previously presented) A network element according to claim 33, wherein the software program comprises a programming code for adjusting the transmission rate.

35. (canceled)

36. (previously presented) A network element according to claim 33, wherein the software program comprises a programming code for adjusting of both a transmission rate and a sampling rate.